UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

MAR 26 2012

MEMORANDUM

SUBJECT: Work Plan for Supplemental Soil and Groundwater Assessment at the Former Electrolux Jefferson Facility; Jefferson, Iowa – Reviewed

FROM: Diane Harris Diane Harris
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ENSV/IO

TO: Cynthia Hutchison
EPA Project Manager
AWMD/RCAP

The review of the subject document prepared by Golder Associates, dated January 2012, has been completed according to *"EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations,"* EPA QA/R-5 March 2001. The Work Plan was reviewed as a draft and the comments are outlined below.

Comments

1. Signature Page. If EPA approval is needed, the Work Plan will need to be submitted with the appropriate signatures from the facility and with space included for EPA Project Manager and RQAM signatures.

2. § 3.0 Soil and Groundwater Assessment, page 7.

    a. This section is similar to the Project/Task Description section of a QAPP and needs to identify any technical or regulatory standards like action levels that may apply. If there are no such standards which apply, this simply needs to be stated. This information is important for verifying the selected methods are sensitive enough to meet any action levels or other standards the data may be compared to.

    b. Who will be responsible for any corrective actions that may be needed in the field?

3. § 3.3 Soil Borings and Sampling, page 10.

    a. Two to three soil samples will be collected per boring for laboratory analysis for one or more groups of analytes. How will it be determined which samples will be analyzed for which analytes?

b. No method is identified here for the metals analysis.

c. The SOP for soil sampling does identify sample preservation but does not address maximum holding times or how the samples will be packaged and shipped to the laboratory.

4. § 3.4 Monitoring Well Installation and Groundwater Sampling, page 11.

   a. A subset of the existing monitoring wells will be sampled and although an assumption can be made, the reason for sampling the existing monitoring wells listed here needs to be clarified.

   b. The SOP for the groundwater sampling found in Appendix A states that if there are air bubbles present in a VOC sample, it should be opened and more sample added. This process is to be repeated until there are no air bubbles present in the sample. This approach needs to be verified because traditionally if an aqueous VOC sample contains any air bubbles after additional sample is added, it is discarded and a new sample collected due to the potential for the loss of VOCs by repeatedly reopening the sample container after the sample is collected.

   c. The SOP for groundwater sampling refers to laboratory-supplied, pre-preserved sample containers but does not specify what the containers are, the preservative(s) to be used, the maximum holding times, or how the samples will be packaged and shipped to the laboratory.

5. Appendix A, SOP-2. This SOP describes the field documentation. However, the following information needs to also be addressed for documentation and records:

   a. Contents of the data report
   b. The process and responsibilities for ensuring the most current approved version of the plan is available
   c. The field sampling and/or laboratory narratives (if applicable)
   d. The retention time for project records and reports (section 2.0 in Appendix A does discuss where records will be stored)

6. Appendix A, SOP-6. This SOP identifies the type of field QC samples to be collected and their frequency but does not describe how their results will be evaluated and what action might be taken if those results are not acceptable.

7. Analytical Methods Requirements. Sections 3.3 and 3.4 identify the reference methods the laboratory will use but does not provide any additional information about the laboratory including QC procedures, instrument maintenance/calibration, responsibilities for laboratory corrective action, the needed laboratory turnaround time, data review, and laboratory assessments. This information may be contained in laboratory documentation like SOPs, QC manuals, etc. and reference to these documents can be included and attached (if possible).

8. Missing Elements. Because this document was prepared as a Work Plan and not a QAPP, the following elements were missing and no equivalent information could be found. Please refer to R-5 for more information on these elements. Not every element will apply to every project. If an element does not apply, this simply needs to be explained in the document.

   a. Distribution List
   b. Project/Task Organization

c. Quality Objectives and Criteria for Measurement Data
d. Special Training/Certification Requirements
e. Instrument/Equipment Testing, Inspection and Maintenance Requirements
f. Inspection/Acceptance Requirements for Supplies and Consumables
g. Data Acquisition Requirements for Non-direct Measurements
h. Assessments and Response Actions
i. Data Review, Validation, and Verification*
j. Validation and Verification Methods*
k. Reconciliation with User Requirements*

*Section 2.0 in Appendix A does discuss data review but only in terms of the EDD and common laboratory errors and not in terms of data quality requirements and usability typically addressed as part of the data review, validation, and verifications sections of a QAPP.

If you have any questions, please contact me at x7258.

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